

## Ethical Leadership: A Factor in Mission Readiness



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### Abstract

Emotional exhaustion is a threat to mission readiness. This paper describes a psychological process in which ethical leadership influences emotional exhaustion not only directly, but also indirectly through unit cohesion. The model was tested among 338 uniformed Department of Defense personnel deployed in combat zones—personnel likely exposed to operational situations that generally are (or can potentially become) high moral intensity situations. The tests revealed that unit cohesion partially mediates the relationship between ethical leadership and emotional exhaustion. A boundary condition was also identified for this process; namely, the process does not hold among low-conscientiousness personnel. Implications for command practice are discussed.

The findings in this report are not to be construed as an official DEOMI, U.S. military services, or Department of Defense position, unless designated by other authorized documents.

### Ethical Leadership: A Factor in Mission Readiness

In describing the characteristics of leaders, Admiral James B. Stockdale (as cited in Taylor & Rosenbach, 1984) argued the following:

First, they need to be moralists, not just poseurs who sententiously exhort men to be good, but thinkers who elucidate what the good is. This requires first and foremost a clear idea of right and wrong and the integrity to stand behind your assessment of any situation. (p. 67)

Indeed, ethical leadership is important in both civilian and military settings (Brown, Treviño, & Harrison, 2005; Schaubroeck et al., 2012; Walumbwa & Schaubroeck, 2009).

Emerging literature indicates that ethical leadership affects subordinate well-being (Den Hartog & Belschak, 2012; Kalshoven & Boon, 2012; Zhang, Walumbwa, Aryee, & Chen, 2012; Zhu, May, & Avolio, 2004). Following Ashforth, Gioia, Robinson, and Treviño's (2008) call for increased scholarly attention to ethics, we sought to inform theory and command practice by describing a psychological process in which ethical leadership has both indirect and direct effects on emotional exhaustion. Specifically, we aimed to (1) establish the link between ethical leadership and emotional exhaustion, (2) investigate unit cohesion as a partial mediator of that relationship, and (3) ascertain the extent to which the direct and indirect effects of ethical leadership on emotional exhaustion are moderated by conscientiousness.

### **Emotional Exhaustion**

Burnout refers to a syndrome of emotional exhaustion, depersonalization, and diminished personal accomplishment (Maslach, 1982). Emotional exhaustion is characterized by fatigue and feeling worn out because of work (Maslach & Jackson, 1981; Wright & Cropanzano, 1998) and it has emerged as the central dimension of burnout (Cordes & Dougherty, 1993; Gaines & Jermier,

1983; Maslach, 1982; Wright & Bonett, 1997; Zohar, 1997). Shirom (1989) suggested that emotional exhaustion captures the “core meaning” of burnout, given its relevance to physical and psychological depletion. Moreover, meta-analytic findings have indicated that emotional exhaustion exhibits stronger relationships with other work outcomes than depersonalization and diminished personal accomplishment (Lee & Ashforth, 1996). Indeed, emotional exhaustion plays an essential role in affecting numerous organizational outcomes, including job performance, health, voluntary turnover, organizational citizenship behavior, and organizational commitment (Cropanzano, Rupp, & Byrne, 2003; Halbesleben & Buckley, 2004; Wright & Cropanzano, 1998). Similar to chronic fatigue (Gaines & Jermier, 1983) emotional exhaustion gives rise to safety concerns for personnel whose work may be impaired by fatigue (e.g., military personnel, miners, and police officers). Thus, we focused on emotional exhaustion rather than the other facets of burnout.

Antecedents of emotional exhaustion include personality traits and aspects of the situation (e.g., Alarcon, Eschleman, & Bowling, 2009; Halbesleben, 2006; Lee & Ashforth, 1996; Wang, Bowling, & Eschleman, 2010); leadership style is one such aspect (Avolio, Zhu, Koh, & Bhatia, 2004; Densten, 2005; Hetland, Sandal, & Johnsen, 2007; Seltzer & Numerof, 1988). Empirically-identified aspects of leadership that affect emotional exhaustion include charismatic leadership, supervisor support, autocratic leadership, and passive-avoidance leadership (Corrigan, Diwan, Campion, & Rashid, 2002; De Hoogh & Den Hartog, 2009; Hetland et al., 2007; Seltzer, Numerof, & Bass, 1989). In the present study, we focused on ethical leadership. Consistent with scholars who described antecedents in terms of job demands (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Grandey, Dickter, & Sin, 2004; Lee & Ashforth, 1996) and job resources (e.g., Gaines & Jermier, 1983; Lee & Ashforth, 1996), we employed resource-based stress theories to

link ethical leadership with emotional exhaustion.

### **Ethical Leadership**

Ethical leadership refers to “the demonstration of normative appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making” (Brown et al., 2005, p. 120). Although ethical leadership conceptually overlaps with transformational leadership (Bass & Avolio, 2000), efforts to establish the construct validity of ethical leadership have supported its distinctiveness from the idealized influence dimension of transformational leadership (Brown et al., 2005; Mayer, Aquino, Greenbaum, & Kuenzi, 2012).

An ethical leader is likely to be perceived by followers as ethical when he/she (1) engages in normatively appropriate conduct, (2) acts in a way that is consistent with his/her espoused values (e.g., not conforming in response to political pressure), (3) talks with followers about ethics and proactively encourages them to behave ethically, (4) manages situations with procedural and interpersonal justice in mind, (5) values honest relationships, and (6) punishes unethical behavior (Avey, Palanski, & Walumbwa, 2011; Brown et al., 2005; Brown & Treviño, 2006; Kacmar, Bachrach, Harris, & Zivnuska, 2011; Kalshoven, Den Hartog, & De Hoogh, 2011; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009; Walumbwa & Schaubroeck, 2009). Ethical leaders do more than stick to the letter of formal agreements and the norm of reciprocity, and they actively seek subordinates’ input (Walumbwa & Schaubroeck, 2009).

Subordinates often seek ethical guidance from outside themselves (Kohlberg, 1969; Treviño, 1986). Given the authority and influence embedded in their role, leaders are an important source for such ethical information. The effects of high (vs. low) levels of ethical leadership on subordinates include (1) higher satisfaction and dedication (Brown, Treviño, & Harrison, 2005; De

Hoogh & Den Hartog, 2008; Neubert, Carlson, Kacmar, & Chonko, 2009; Weaver, Treviño, & Agle, 2005), (2) higher task and contextual performance (Brown et al., 2005; Kacmar, Bachrach, Harris, & Zivnuska, 2011; Piccolo, Greenbaum, Den Hartog, & Folger, 2010; Mayer et al., 2012; Walumbwa & Schaubroeck, 2009; Zhang et al., 2012), (3) greater role clarity and emotional support (Kalshoven & Boon, 2012), (4) fewer deviant and unethical acts (Avey et al., 2011; Mayer, Aquino, Greenbaum, & Kuenzi, 2012; Schaubroeck et al., 2012; Stouten et al., 2010), and (5) greater well-being (Avey, Wernsing, & Palanski, 2012; Den Hartog & Belschak, 2012; Kalshoven & Boon, 2012; Zhang et al., 2012). We argue that these relationships are optimally explained in terms of resources; that is, whereas a high level of ethical leadership provides personnel with valuable job resources, a low level of ethical leadership acts as a hindrance stressor that compels subordinates to mobilize coping efforts, thereby expending valuable resources.

Viewing ethical leadership as a valuable resource for personnel, we draw on conservation of resources theory (COR; Hobfoll, 1989, 1998) and the job demands-resources model (JD-R; Bakker, Demerouti, de Boer, & Schaufeli, 2003; Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) to posit that ethical leadership prevents or decreases emotional exhaustion among subordinates. The perception of resource loss, threat to resources, and inability to gain new resources can result in strain (Hobfoll, 1989). Supervisors, as providers of resources, can directly influence the stress experienced by their subordinates.

Ethical leaders are likely to prevent or decrease subordinates' emotional exhaustion in at least three ways. First, personnel rely on leaders for ethical guidance in order to behave ethically in the organization (Kohlberg, 1969; Brown, Treviño, & Harrison, 2005), and can thus seek it from leaders. Meanwhile, they may feel more assured that they will not become involved in negative ethics-related situations. Second, ethical leaders are honest and trustworthy, and they emphasize

just decision-making (Brown et al., 2005; Brown & Treviño, 2006), which cultivates justice perceptions among subordinates. Justice perceptions are positively related to well-being (e.g., Bakker, Schaufeli, Sixma, Bosveld, & Van Dierendonck, 2000; Gabris & Ihrke, 2001; Howard & Cordes, 2010). As noted by Avey, Wernsing, and Palanski (2012), subordinates of highly ethical leaders “perceive their work experiences as more fair and their tasks as more meaningful than personnel working with less ethical, neutral, or ambiguous leaders who do not emphasize these norms and values” (p. 25). Third, because supervisors high in ethical leadership are consistent, subordinates know that they can rely on their supervisors for these resources. The anticipation of a steady stream of future resources is a resource in itself.

In contrast, personnel who are not led by ethical leaders may have to seek ethical guidance from other organizational members. Without clear guidance on how to perform ethically, personnel might feel uncertain and worry about potential negative consequences from failing to follow ethical norms. In addition, leaders who do not model ethical leadership are likely to be seen as having limited integrity and devaluing justice, both of which yield perceptions of injustice among followers. Perceptions of injustice expose personnel to potential resource losses, since getting what they deserve becomes doubtful. Moreover, the anticipation (i.e., threat) of limited future resources is a resource drain in itself.

From the JD-R model perspective, low ethical leadership can be a job demand that requires sustained mental effort with which to cope (Bakker et al., 2003; Demerouti et al., 2001; Crawford, LePine, & Rich, 2010). Job demands are either challenge stressors or hindrance stressors (Cavanaugh, Boswell, Roehling, & Boudreau, 2000). Crawford et al. (2010) found that challenge stressors (e.g., job responsibilities) trigger positive emotion (e.g., work engagement), because they promote potential personal growth or gains. In contrast, hindrance demands (e.g., organizational

politics) trigger negative emotion (e.g., burnout), because they have the potential to harm personal growth or gains. Supervisors who are low in ethical leadership are likely to be unethical leaders and/or to lack a proactive ethics-related agenda (Treviño et al., 2000; Brown & Treviño, 2006). In other words, at best, they do not model ethical behaviors and discuss ethical standards, which may become obstacles (i.e., hindrance stressors) to subordinates' personal growth and success in the organization. At worst, they are unethical individuals themselves. Supervisors who are high in ethical leadership offer to subordinates the appeal of an opportunity to behave ethically, which likely serves as a challenge stressor.

In sum, we suggest that high levels of ethical leadership provide subordinates with resources—whether via guidance (COR theory) or challenge (JD-R model)—that, other things being equal, protect them from suffering emotional exhaustion. However, low levels of ethical leadership leave subordinates with fewer resources—whether via insufficient ethical guidance, an unethical/unfair work climate, or an anticipation of limited future resources (COR theory) or obstacles (JD-R model)—that, other things being equal, expose them to emotional exhaustion.

**Hypothesis 1.** Ethical leadership is negatively related to emotional exhaustion.

Following Brown and Treviño's (2006) call for work exploring the underlying mechanisms through which ethical leadership influences employee outcomes, scholars have proposed and tested models to explain the psychological processes by which ethical leadership affects followers. Avey et al. (2012) reported an indirect effect of ethical leadership on well-being through voice. In other words, they found that high ethical leadership promotes employee voice (i.e., speaking out about concerns and offering suggestions for improvements), which enhances employee well-being. Den Hartog and Belschak (2012) found evidence of a conditional indirect effect of ethical leadership on personal initiative and counterproductive work behavior through

work engagement. They reported that ethical leadership has a more robust relationship with work engagement among workers with low-Machiavellian leaders than among those with high-Machiavellian leaders. Walumbwa, Morrison, and Christensen (2012) found that ethical leadership influenced group in-role performance by enhancing group conscientiousness and group voice. Kalshoven and Boon (2012) reported a conditional indirect effect of ethical leadership on helping behavior through well-being. They reported that this psychological process only applies to personnel experiencing ineffective human resources command practices. Zhang et al. (2012) examined a chain of effects in which ethical leadership impacted politics perceptions, which led to uncertainty, and then to emotional exhaustion. We focused on unit cohesion as a mediator through which ethical leadership has an impact on emotional exhaustion.

### **Unit Cohesion**

Unit cohesion refers to the extent to which work group members bond with each other and are united to achieve unit goals (Shaws, 1981; Walsh, Matthews, Tuller, Parks, & McDonald, 2010). When cohesion is high, work group members are motivated to work hard (Cartwright, 1968; Davis, 1969). Unit cohesion is positively related to job performance (Beal, Cohen, Burke, & McLendon, 2003; Mullen & Copper, 1994) and satisfaction with the job and unit (McGrath, 1984). The proposed mechanism behind this relationship is that high cohesion results in increased communication, efficiency, and productivity, which in turn yields higher levels of satisfaction among group members (McGrath, 1984).

Anecdotal evidence from the Vietnam War era suggests that ethical leadership promotes unit cohesion (Shay, 1994). In general, effective leadership yields unit cohesion (Greene & Schriesheim, 1980) as well as unit efficacy (Lester, Meglino, & Korsgaard, 2002). Schriesheim et al. (1979) suggested that leaders influence unit cohesion by satisfying unit

members' needs, enhancing the attractiveness of the unit, and increasing reward expectancy for hard work. We suggest that ethical leadership influences these outcomes in at least five ways.

First, ethical leaders satisfy followers' needs of ethical guidance and are perceived as attractive and credible by followers (Brown et al., 2005). Followers may work harder to satisfy the leader's needs (i.e., achieve unit objectives) by working closely with other coworkers in the unit.

Second, the ethical guidance received likely enhances efficacy in understanding priorities for decision-making. An ethical leader is likely to prescribe a clear way to deal with problems and handle operational situations. The ethical culture dictated by the leader may clarify the procedures that unit members should follow, thus clarifying group processes and enhancing cohesion. Indeed, "leadership actions that persuade and develop subordinate competency beliefs may be as critical a determinant of collective efficacy as the group's prior performance experiences, if not more so" (Zaccaro, Blair, Peterson, & Zazanis, 1995, p. 317). As Bandura (1991) observed, efforts to identify the processes underlying moral behavior have conceptualized moral thinking as a process of information integration. Social cognitive and social information processing theories explain how personnel make sense of themselves and others: Personnel observe and model others' behavior while simultaneously linking these acts to information about incentives (Bandura, 1971).

Situational cues position personnel to interpret events, understand norms, develop attitudes, and make decisions accordingly (Crick & Dodge, 1994). Hence, the situation creates socially constructed realities that provide personnel with information regarding what behaviors are acceptable, appropriate, and expected. Social cues (e.g., the ethical behavior of the leader) influence social/moral behavior in three ways (Bandura, 1986): (1) they indicate the standards for moral and social conduct; (2) they establish the collective support in the social milieu for adherence to those standards; and (3) as in situations of unethical or low-ethical leadership, they

facilitate selective activation and disengagement of moral self-regulation. That is, potent contextual cues can override personal standards of moral conduct, which “enables otherwise considerate people to perform self-serving activities that have detrimental social effects” (Bandura, 1991, p. 280). These processes are particularly salient in high moral intensity situations. The degree of the moral intensity of a situation reflects (1) the magnitude of consequences for others, (2) the strength of the ethical norms relevant to that situation, (3) the temporal immediacy of the event, and (4) the probability of the effect (Beu & Buckley, 2004; Brown & Treviño, 2006). Whereas high moral intensity situations likely occur cyclically in civilian organizations, we argue that modern combat situations typically have at least three of the characteristics—strong ethical norms, considerable magnitude of consequences, and a high probability of the effect under consideration—typical of high moral intensity situations. As noted by Olsen, Eid, and Larsson (2010):

In a military operational context, a high moral intensity situation unfolds in a dangerous environment, given the high risk of injuring or killing innocent bystanders or ruining civilian property in a disproportional way. Though low moral intensity situations will challenge the ability to recognize ethical aspects in a complex situation, high moral intensity situations will challenge moral character, discipline, and the ability to act in accordance with ethical norms in a more direct way—even when such behavior requires personal sacrifice. (p. 138)

Third, ethical leaders engage in normatively appropriate behaviors, such as openness and honesty, and are motivated by altruism; hence, they treat personnel fairly and considerately (Brown et al., 2005). Personnel are likely to be more attracted to units with ethical leaders because they feel they are treated fairly.

Fourth, leaders make ethical decisions on unit members' rewards, which enhance the reward expectancy for hard work and good performance. Followers of ethical leaders are more likely to bond with each other to achieve common unit goals that will be rewarded appropriately.

Fifth, ethical leaders may decrease the occurrence of interpersonal conflicts among group members that undermine unit cohesion (Brown & Treviño, 2006). Social learning principles suggest that the ethical aspects of leadership can have trickle-down effects (Mayer et al., 2009), such that the subordinates of ethical leaders tend to behave as do their supervisors toward their coworkers. Schaubroeck et al. (2012) found empirical evidence that ethical leadership at higher organizational levels positively influences ethical culture in work groups. Thus, unit members of ethical leaders may treat coworkers in more ethical and fairer ways, which likely limits interpersonal conflict.

**Hypothesis 2.** Ethical leadership is positively related to unit cohesion.

In their meta-analysis, Lee and Ashforth (1996) found that unit cohesion was negatively related to emotional exhaustion. Personnel who perceive high levels of unit cohesion feel an attachment to the unit, which motivates them to contribute to unit outcomes and promote the well-being of the unit. This attachment reflects perceptions of coworker support that is associated with low levels of burnout (Halbesleben, 2006). Perceptions of current and future coworker support are resources. Accordingly, and to replicate previous findings, we proposed:

**Hypothesis 3.** Unit cohesion is negatively related to emotional exhaustion.

At least two studies have indicated that unit cohesion-related constructs mediate the effects of leadership on outcomes. In a study of soldiers, Bass, Avolio, Jung, and Berson (2003) found that platoon (unit) cohesion mediated the effects of both transformational and transactional leadership on platoon performance. Sosik, Avolio, and Kahai (1997) found that group potency mediated the

relationship between transformational leadership and performance. The underlying notion is that leadership influences unit processes, which then affect individual unit member behavior.

Consistent with this logic and the findings of these two studies, we anticipated that ethical leadership affects emotional exhaustion through unit cohesion.

Ethical leaders unite their followers toward common unit goals, enhancing followers' positive views about the supportiveness of the unit. Such positive views, in turn, likely lessen emotional exhaustion. That is, we argue that ethical leadership increases perceptions of unit cohesion, which then minimizes emotional exhaustion. In other words, at least some of the effect of ethical leadership on emotional exhaustion is indirect through unit cohesion. However, for at least two reasons, some of the effect of ethical leadership on emotional exhaustion is likely direct.

First, as described in terms of the health impairment process of the JD-R model, the physical and psychological efforts needed to combat work demands are directly related to burnout (Bakker & Demerouti, 2007). Personnel who observe ethical leadership behavior likely experience less emotional duress over time compared to their counterparts whose leaders do not exhibit ethical leadership. Hence, ethical leadership to some extent directly decreases personnel's emotional exhaustion. Second, unit cohesion does not fully capture other variables that may mediate the link between ethical leadership and emotional exhaustion. For example, other types of resources linked with ethical leadership, including task significance and autonomy (Piccolo et al., 2010) and perceptions of psychological safety (Walumbwa & Schaubroeck, 2009), might act as mediators (Bakker & Demerouti, 2007). Personnel's perceptions of organizational politics are also affected by ethical leadership, which is linked to emotional exhaustion through uncertainty perceptions (Zhang et al., 2012). Hence, some of the effect of ethical leadership on emotional exhaustion is likely direct.

**Hypothesis 4.** The effect of unethical leadership on emotional exhaustion is both direct and indirect through unit cohesion.

The direct and indirect effects of ethical leadership may depend on individual characteristics. For example, Kacmar et al. (2011) found that the interaction patterns of ethical leadership and politics perceptions on citizenship behavior differed among men and women. Additionally, follower personality plays an important role in determining leadership influence on subordinates (De Hoogh & Den Hartog, 2009; Ehrhart & Klein, 2001; Howell & Shamir, 2005). Extending Avey et al.'s (2012) approach, we suggest that the psychological process that we have proposed may not apply equally to all personnel. We examined individual differences in conscientiousness, envisioning different influence among individuals at different points along the construct spectrum.

### **Conscientiousness**

We know that personality traits (e.g., internal locus of control, conscientiousness, and emotional stability) affect the relationship between leadership behaviors and follower well-being (De Hoogh & Den Hartog, 2009; Perry, Witt, Penney, & Atwater, 2010). The process by which they do remains unclear. Trait activation theory (Tett & Burnett, 2003; Tett & Guterman, 2000) may help us to understand how and when personality affects strain. According to its advocates, when situations allow for variance in behavior, they trigger activation of relevant personality traits. In other words, when an individual possesses the cued trait, the trait is activated; when an individual does not possess the cued trait, no trait is activated. For example, an informal meeting might cue extroversion. Persons low in extroversion would be likely to reactively engage others, while those high in extroversion would be likely to proactively engage others.

As one of the traits in the five-factor model of personality, conscientiousness consists of

two major facets—dependability and achievement (Digman, 1990; McCrae & Costa, 1987; Mount & Barrick, 1995). Conscientious personnel are willing to follow both rules and socially prescribed norms for impulse control, and they tend to be achievement-oriented and organized (John & Srivastava, 1999). In contrast, low-conscientiousness personnel are disorganized, careless, and easily distracted (Johnson & Ostendorf, 1993). High-conscientiousness personnel think carefully and adhere closely to moral standards (Costa & McCrae, 1992). Hence, perhaps more so than other personality traits, conscientiousness is particularly relevant to the issue of ethics. In other words, we suggest that conscientiousness is a trait relevant to situations reflecting the ethical behavior of the leader.

We suggest that ethical leadership is more strongly related to emotional exhaustion among high-conscientiousness subordinates than low-conscientiousness subordinates. Because they value rule adherence, highly conscientious personnel are likely sensitive to ethical leadership. They likely experience (1) high levels of ethical leadership in terms of resources (e.g., ethical guidance, justice perceptions, and anticipation of continuous resources) and/or a challenge stressor (i.e., an opportunity to rise to the occasion and behave well) and (2) low levels of ethical leadership in terms of a resource drain (i.e., having to “make the call” in the absence of guidelines), anticipation of ongoing resource expenditures (i.e., a threat to resources), and/or a hindrance stressor (i.e., a lack of ethical guidelines). In contrast, low-conscientiousness personnel simply do not care. In other words, because they are not predisposed to adhere to rules and norms, low-conscientiousness personnel are less likely to be sensitive to the presence or absence of leaders’ ethical behaviors. For them, ethical leadership simply is less salient than it is to highly conscientious personnel.

Our application of trait activation theory to understand how conscientiousness might moderate the ethical leadership-emotional exhaustion relationship is not without alternatives.

According to advocates of the JD-R model, personal resources are different from job resources. Job resources are provided to the individual by the job, and personal resources are brought to the job by the worker (Bakker, 2008). “Aspects of the self” that reflect resiliency (Hobfoll, Johnson, Ennis, & Jackson, 2003; Xanthopoulou et al., 2007, p. 123), personal resources are utilized to invest, manage, and direct other resources (Hobfoll, 2001). They capture the degree to which personnel perceive that they can effectively control and affect the environment (Hobfoll et al., 2003). Xanthopoulou et al. (2007) argued that personal resources function similarly to job resources; that is, they are capable of buffering the impact of demands on exhaustion. Scholars have described personality traits as personal resources that function in this manner (Halbesleben, Harvey, & Bolino, 2009; Perrewé & Spector, 2002; Spector, 2003).

Halbesleben et al. (2009) argued that conscientiousness functions as a personal resource by determining the efficiency of resource expenditure; that is, it affects how people direct attention and resources toward tasks and problems. This is a resource-budgeting strategy that minimizes strain (Bakker, 2008; Connor-Smith & Flachsbart, 2007; O'Connor & O'Connor, 2004; Xanthopoulou et al., 2007; Zellars et al., 2006). Moreover, highly conscientious personnel mostly use problem-focused coping strategies (Connor-Smith & Flachsbart, 2007), which buffer the negative effects of job demands or lack of resources (Baker & Berenbaum, 2007). Accordingly, following the JD-R model logic, we might posit that the relationship between ethical leadership and emotional exhaustion is stronger among persons low in conscientiousness than it is among those high in conscientiousness. It is possible that, because they are unlikely to waste resources, personnel high in conscientiousness might experience less strain when perceiving low levels of ethical leadership than personnel low in conscientiousness.

Whereas we recognize the possibility that conscientiousness might act as a resource that

buffers the impact of ethical leadership on strain, we suggest that trait activation theory argument is more appropriate. We maintain that ethical leadership is simply not a particularly salient environmental characteristic to personnel low in conscientiousness. Therefore, we hypothesized the following:

**Hypothesis 5.** The direct effect of ethical leadership on emotional exhaustion is moderated by conscientiousness, such that the negative relationship is stronger among personnel who are high rather than low in conscientiousness.

We suggest that conscientiousness also moderates the relationship between ethical leadership and unit cohesion (i.e., first stage moderation; Edwards & Lambert, 2007). Because they value ethical norms and rules, highly conscientious personnel perceiving ethical leadership likely have their needs for ethical guidance met. As ethical leaders create an ethical work environment (Mayer et al., 2010), they may also see the unit as more attractive and promising. Indeed, conscientious personnel are likely grateful for the ethical environment, resulting in more positive interactions with coworkers. Together, the satisfied needs for ethical guidance, attractiveness of the unit, and positive interactions with other unit members may contribute to the perception of unit cohesion. In contrast, low-conscientiousness personnel perceiving ethical leadership are unlikely to judge the attractiveness and outlook of the unit based on the ethical behavior of the leader because (1) they may not find the leader as particularly helpful in meeting their needs and (2) they might not appreciate the ethical working environment and, therefore, not see it as a factor relevant to unit cohesion. Accordingly, we proposed the following:

**Hypothesis 6.** Conscientiousness moderates the relationship between ethical leadership and unit cohesion, such that the positive relationship is stronger among high-conscientiousness personnel than among low-conscientiousness personnel.

We suggest that conscientiousness also moderates the relationship between unit cohesion and emotional exhaustion (i.e., second stage moderation; Edwards & Lambert, 2007). Highly conscientious personnel share such characteristics as being hardworking, achievement-driven, and dutiful. They likely value a cohesive unit as a resource to perform tasks and cope with stressors; that is, unit cohesion is a salient situational cue to personnel high in conscientiousness. They likely experience a lack of unit cohesion as threatening because it can be a potential obstacle to success. In contrast, personnel who are low in conscientiousness are more irresponsible, careless, and less motivated. Hence, they likely care less about how their unit functions and, therefore, are emotionally less reactive to unit cohesion. Accordingly, we proposed the following:

**Hypothesis 7.** Conscientiousness moderates the relationship between unit cohesion and emotional exhaustion, such that the negative relationship is stronger among high-conscientiousness personnel than among low-conscientiousness personnel.

We present in Figure 1 our overall theoretical model. As shown there, Hypotheses 6 and 7 suggest that conscientiousness functions as a moderator at both the first (path *a* in Figure 1) and second (path *b* in Figure 1) stages of the mediation. Models proposing this configuration are moderated mediation models (James & Brett, 1984; Preacher, Rucker, & Hayes, 2007). Whereas Hypotheses 1, 2, 3, and 5 may be examined by testing the significance of individual paths in the model, testing individual paths is inappropriate for establishing mediation (Hypothesis 4) and moderated mediation effects (Hypotheses 6 and 7; Edwards & Lambert, 2007; Preacher et al., 2007). Accordingly, we offer a final hypothesis specifying the proposed overall moderated mediation effects:

**Hypothesis 8.** Conscientiousness moderates the indirect effect of ethical leadership on emotional exhaustion through unit cohesion, such that the relationship is

stronger among high-conscientiousness personnel than among low-conscientiousness personnel.

## Control Variables

Emotional stability is an important predictor of emotional exhaustion (e.g., De Hoogh & Den Hartog, 2009; Kahn, Schneider, Jenkins-Henkelman, & Moyle, 2006), as are demographic variables (e.g., Brewer & Shapard, 2004; Purvanova & Muros, 2010). Hence, we employed emotional stability, gender, minority status, age, and rank as potential control variables.

## Method

### Participants and Procedure

We collected data from 338 of approximately 578 (58%) United States uniformed military personnel working in units deployed in combat zones outside of the continental United States. They voluntarily completed a survey during duty hours. Of the 338, (1) 55.6% were non-minorities, and 44.4% were minorities; (2) 80.2% were men, and 19.8% were women; (3) 13.9% were less than 20 years old, 46.4% were between 20 and 25 years old, 25.7% were between 26 and 30 years old, 12.1 % were between 31 and 40 years old, and 1.8% were over 40 years old; (4) 11.5% held junior enlisted rank, 67.2% held mid-level enlisted rank, 10.9% held senior enlisted rank, 0.6% held command-level enlisted rank, 5.3% held junior officer rank 4.1% held senior officer rank, and 0.3% held flag-level officer rank.

### Measures

Participants responded to each of the following statements on a 5-point Likert-type scale ranging from 1, “Strongly Disagree,” to 5, “Strongly Agree.”

**Ethical Leadership.** We adapted five items from the Brown et al. (2005) ethical leadership scale: (1) “My immediate supervisor conducts his/her personal life in an ethical manner;” (2) “My

immediate supervisor defines success not just by results but also the way they are obtained;” (3) “My immediate supervisor sets an example of how to do things the right way in terms of ethics;” (4) “My immediate supervisor disciplines unit personnel who violate ethical standards;” and (5) “My immediate supervisor discusses military ethics or values with unit personnel.” High scores reflect high levels of ethical leadership.

**Emotional Exhaustion.** We assessed exhaustion using five items adapted from Maslach Jackson, and Leiter (1996). We used the phrase “duty” or “duty assignments” in place of “work” (e.g., “Over the past 6 months, I felt emotionally drained from my duty assignments”). High scores reflect high levels of emotional exhaustion.

**Unit cohesion.** We used the four-item (e.g., “Members of my work group really care about each other”) Walsh et al. (2010) unit cohesion scale. High scores reflect high levels of unit cohesion.

**Personality.** We used the “Big Five” factor markers in Goldberg’s (1999) International Personality Item Pool to measure personality. Three items assessed conscientiousness (e.g., “I am almost always prepared”), and three items assessed emotional stability (e.g., “I am relaxed most of the time”). High scores reflect high levels of conscientiousness and emotional stability, respectively.

## Results

Table 1 presents the descriptive statistics, reliability estimates, and an intercorrelation matrix. As shown there, ethical leadership was negatively related to emotional exhaustion ( $r = -0.35, p < 0.01$ ) and positively related to unit cohesion ( $r = 0.36, p < 0.01$ ), which also was negatively related to emotional exhaustion ( $r = -0.31, p < 0.01$ ); these respective results are consistent with Hypotheses 1, 2, and 3. As also reflected in Table 1, two of our control variables,

minority status and emotional stability, also predicted emotional exhaustion. We excluded the other three control variables in subsequent analyses, since including unnecessary covariates reduces statistical power and biases the estimates (Becker, 2005).

### **Preliminary Analyses**

Because all of our measures were answered by the same source, we conducted a series of confirmatory factor analyses to test the distinctiveness of the constructs. We compared the measurement model (four-factor model) with two nested models. We present the results of the confirmatory factor analyses in Table 2. Compared to the measurement model, a 3-factor measurement model that allowed ethical leadership and unit cohesion to load on the same factor fitted the data most poorly ( $\Delta \chi^2 = 578.98$ ,  $\Delta df = 3$ ,  $p < 0.001$ ). We further tested a 2-factor model with ethical leadership, unit cohesion, and emotional exhaustion combined, as these three measures accurately reflect participants' work experience. This 2-factor model also displayed poorer fit indices than the measurement model ( $\Delta \chi^2 = 623.94$ ,  $\Delta df = 2$ ,  $p < 0.001$ ). In these factor analyses, we allowed the error terms of the third and the fourth unit cohesion items to be correlated, as these two items—unlike the other items in the unit cohesion scale—directly address interpersonal relationships with unit members (i.e., "care about each other" and "trust each other"). It is reasonable to expect that the unique variances of these two items overlap (Klein, 2011).

We also conducted a separate confirmatory factor analysis to test the impact of common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). We allowed every item to load on its respective construct and a latent method factor that was uncorrelated with other constructs. The variance explained by the latent method factor was 4%, which was lower than the 25% median score in published studies (Williams, Cote, & Buckley, 1989).

Because respondents were clustered in units, we looked at the between-group variance in

emotional exhaustion. Significant between-group variance in emotional exhaustion would necessitate the use of multilevel modeling to take into account potential biases from the non-independence of the data. Therefore, to determine whether multilevel modeling was required for the analyses, we estimated a null random intercept model for emotional exhaustion using SAS Proc Mixed (Snijders & Bosker, 2007). Equivalent to a one-way ANOVA, this provides estimates of between-group (level-2) variance and within-group (level-1) variance in a given variable (respectively, the parameters are labeled  $\tau^2$  and  $\sigma^2$ ; Bliese, 2000). We found that emotional exhaustion did not significantly vary between units ( $\tau^2 = 0.008$ , SE = 0.03,  $p = ns$ ). Therefore, we considered it appropriate to use traditional ordinary least squares regression techniques to test our hypotheses.

### Tests of Mediation

To test mediational effects, we conducted formal significant tests of the indirect effect, which is calculated as the product of the regression coefficient of mediator M regressed on independent variable X (path  $a$  in Figure 1) and the regression coefficient of outcome Y regressed on mediator M while controlling for X (path  $b$  in Figure 1). Because the indirect effect (Path  $c'$  in Figure 1) is not normally distributed, bootstrapping, which does not require the sampling distribution of the product of two variables to be normal, is more appropriate than the traditional Sobel test (Edwards & Lambert, 2007; Preacher & Hayes, 2008). For the test of moderated mediation, we adopted a moderated path analysis approach to integrate moderation and mediation tests (Edwards & Lambert, 2007). We present the structural model in Figure 2.

We used an SPSS macro (PROCESS; Models 4 and 59) developed by Hayes (2012) to test our hypotheses. This macro allowed us to test both the simple mediation and moderated mediation models. It provides bootstrapped confidence intervals (CIs) for indirect effects. When the

moderator is designated in the model, it also provides bootstrapped CIs for the conditional indirect effect at different values of the moderator variable.

Table 3 presents the results of mediation tests reflecting Hypotheses 1–4. As shown there and consistent with Hypothesis 1, ethical leadership was negatively related to emotional exhaustion. As also shown there and consistent with Hypothesis 2, ethical leadership was positively related to unit cohesion ( $B = 0.41, t = 6.09, p < 0.01$ ). As also shown there and consistent with Hypothesis 3, unit cohesion was negatively related to emotional exhaustion, when controlling for ethical leadership ( $B = -0.20, t = -4.22, p < 0.01$ ).

We predicted in Hypothesis 4 that the effect of ethical leadership on emotional exhaustion was both direct and indirect through unit cohesion. Bootstrap results indicated a significant indirect effect of ethical leadership on emotional exhaustion through unit cohesion, as evidenced by a bootstrapped 99% CI around the indirect effect not overlapping zero (-0.15, -0.04). The direct effect of ethical leadership on emotional exhaustion, when controlling for unit cohesion, was still significant and negative ( $B = -0.19, t = -3.08, p < 0.01$ ), indicating that unit cohesion partially mediates the relationship. Hence, the results were consistent with Hypothesis 4.

### Tests of Moderated Mediation

Table 4 presents the results reflecting Hypothesis 5–8. As shown there and consistent with Hypothesis 5, the ethical leadership  $\times$  conscientiousness cross-product term predicted emotional exhaustion ( $B = -0.21, t = -3.44, p < 0.01$ ). We present in Figure 3 the form of this interaction. As shown there, the relationship between ethical leadership and emotional exhaustion was significant among high-conscientiousness personnel (simple slope = -0.40,  $t = -5.07, p < 0.01$ ), but not among low-conscientiousness personnel (simple slope = -0.10,  $t = -1.21, ns$ ).

As also shown in Table 4 and in line with Hypothesis 6, the ethical leadership  $\times$

conscientiousness cross-product term predicting cohesion approached significance ( $B = 0.14, t = 1.93, p = 0.054$ ). We present in Figure 4 the form of this interaction. As illustrated there, the ethical leadership-unit cohesion relationship was stronger among high-conscientiousness personnel (simple slope = 0.53,  $t = 6.18, p < 0.01$ ) than low-conscientiousness personnel (simple slope = 0.32,  $t = 3.21, p < 0.01$ ). The unit cohesion x conscientiousness cross-product term predicted emotional exhaustion ( $B = -0.15, t = 0.05, p < 0.01$ ). We present in Figure 5 the form of this interaction. As shown there, the relationship between unit cohesion and emotional exhaustion was significant among high-conscientiousness personnel (simple slope = -0.28,  $t = -4.64, p < 0.01$ ) but not among low-conscientiousness personnel (simple slope = -0.06,  $t = 0.94, ns$ ).

With Hypothesis 8, we predicted that conscientiousness moderates the indirect effect of ethical leadership on emotional exhaustion through unit cohesion, such that the relationship between ethical leadership and emotional exhaustion is stronger among high-conscientiousness personnel than low-conscientiousness personnel. According to Preacher et al. (2007), if one, either, or both of the interaction terms from the first model and second model are statistically significant, and the 95% CIs associated with the indirect effect do not contain zero, moderated mediation exists. We examined the conditional indirect effect of ethical leadership on emotional exhaustion (through unit cohesion) at three values of conscientiousness: the mean, one standard deviation above the mean, and one standard deviation below the mean. At the bottom of Table 4, we present the bootstrap results for the conditional indirect effects. As shown there, the bootstrap 99% CI around the conditional indirect effect overlapped zero only at the low-conscientiousness value (-0.09, 0.02). We present in Figure 6 the form of this interaction (i.e., the conditional indirect effect of ethical leadership on emotional exhaustion through unit cohesion). As illustrated there and consist with Hypothesis 8 and the bootstrap 99% confidence intervals, the relationship

between ethical leadership and emotional exhaustion, when controlling for unit cohesion, did not hold among low-conscientiousness personnel.

## **Discussion**

The results suggest that ethical leadership affects emotional exhaustion directly and indirectly through unit cohesion; in other words, unit cohesion partially mediates the relationship between ethical leadership and emotional exhaustion. The direct effect reflects the likelihood that (1) high levels of ethical leadership provide subordinates with resources—whether via guidance (COR theory) or challenge (JD-R model)—that, other things being equal, protect them from suffering emotional exhaustion, and (2) low levels of ethical leadership leave subordinates with fewer resources—whether via insufficient ethical guidance, an unethical/unfair work climate, or the anticipation of limited future resources (COR theory) or obstacles (JD-R model)—that, other things being equal, expose subordinates to emotional exhaustion.

The indirect effect reflects the likelihood that high levels of ethical leadership enhance unit members' experience of unit cohesion by meeting their needs of ethical guidance, improving their efficacy in understanding priorities for decision-making, increasing the attractiveness of the unit through norms of interpersonal justice, facilitating bonding to achieve common unit goals by creating expectations that they will be rewarded appropriately, and decreasing the occurrence of interpersonal conflicts that undermine unit cohesion. Similarly, it also reflects the likelihood that low levels of ethical leadership diminish unit members' experience of unit cohesion by not meeting their needs of ethical guidance, reducing their efficacy in understanding priorities for decision-making, decreasing the attractiveness of the unit through norms of interpersonal justice, inhibiting bonding to achieve common unit goals by creating expectations that they will not be rewarded appropriately, and increasing the occurrence of interpersonal conflicts that undermine

unit cohesion. Furthermore, the indirect effect reflects the likelihood that perceptions of high levels of unit cohesion minimize emotional exhaustion by creating an attachment to the unit and expectations of considerable support from coworkers, while perceptions of low levels of unit cohesion engender emotional exhaustion by creating a detachment from the unit and expectations of limited support from coworkers.

Still, these direct and indirect effects of ethical leadership do not hold among personnel low in conscientiousness. Because low-conscientiousness personnel are not predisposed to adhere to rules and norms, they do not care as much about leaders' ethical behaviors as do personnel high in conscientiousness. In contrast, because they value rule-adherence, highly conscientious personnel are sensitive to the leader's ethical behavior. As reflected in Figures 3 and 4, ethical leadership was more strongly related both to emotional exhaustion and unit cohesion among the personnel high in conscientiousness, compared to those low in conscientiousness.

Similarly, because low-conscientiousness personnel are less concerned about performance outcomes, unit cohesion is not a trait-relevant cue for strain among them. On the other hand, because high conscientiousness personnel are more concerned about performance outcomes, unit cohesion is a trait-relevant cue for strain among them. As reflected in Figure 5, unit cohesion was more strongly related to emotional exhaustion among the personnel high in conscientiousness than those low in conscientiousness. Among personnel reporting high levels of unit cohesion, the highly conscientious personnel reported essentially the same levels of emotional exhaustion as personnel low in conscientiousness. However, among personnel reporting low levels of unit cohesion, the highly conscientious personnel reported levels of emotional exhaustion about half a standard deviation higher than low-conscientiousness personnel.

We highlight three potential contributions to the literature. First, the resources provided by

ethical leadership likely do more than simply guiding ethical behavior. Ethical leaders likely influence follower ethical behavior by setting standards for moral and social conduct, and by establishing support for adherence to those standards (cf. Bandura, 1986). Similarly, unethical or low-ethical leaders likely empower followers to disengage from moral self-regulation. Particularly for personnel in high moral intensity situations, these are important resources. Consistent with work indicating that leaders influence unit climates (e.g., Zohar, 2002), we argue that our results indicate that ethical leadership likely plays a role in how unit members experience the unit (i.e., unit cohesion) and affects well-being as a result. Second, and consistent with resource-based stress theories, ethical leadership likely affects emotional exhaustion by providing helpful resources (i.e., guidance or challenge) at high levels and creating the need to spend resources (i.e., self-determination of priorities or obstacles) at low levels. Third, the moderating effects of conscientiousness indicate the potential boundary conditions for the effects of ethical leadership on unit cohesion and emotional exhaustion, and possibly for the effects of ethical leadership on a host of other phenomena in work organizations. As graphically presented in Figures 3 and 6, the ethical behavior of the leader essentially was irrelevant to those low in conscientiousness. Thus, rather than functioning as a personal resource that buffers the negative impact of low levels of ethical leadership, conscientiousness is likely activated by situations involving ethics. Hence, we suggest that trait activation theory is appropriate for understanding how conscientiousness affects responses to ethical leadership. In other words, it is possible that there are some types of situations (e.g., ethics) in which personality traits that normally function as personal resources that protect personnel from strain may, in fact, actually predispose them to experience it.

### **Limitations, Strengths, and Opportunities for Future Research**

We emphasize four weaknesses of the study. First, the mediational model implies a causal

relationship among ethical leadership, unit cohesion, and emotional exhaustion. However, due to the cross-sectional design of our study, we cannot draw conclusions about the causality of the results. Therefore, we call on future researchers to employ longitudinal studies to test the model we proposed. Second, even though we found that the potential influence of a common method factor was comparatively limited, we stress that our use of self-report surveys was subject to the influence of common method variance (Podsakoff et al., 2003). Third, we found that emotional exhaustion did not vary significantly among units. Both ethical leadership and unit cohesion can be considered as group-level variables. Whereas we suspect that we did not find group-level effects because ethical leadership and unit cohesion are not trait-relevant situational cues to those low in conscientiousness, we also call on future researchers to further investigate this issue. Fourth, cultural backgrounds may influence definitions and perceptions of ethical behavior (Resick et al., 2011). Controlling for cultural background, and testing the model with multiple samples representing different cultures, would likely be helpful.

We highlight two potential strengths. For two reasons, the sample is a potential strength of the study. First, because Department of Defense operational contexts typically are (or frequently have the potential to become) high moral intensity situations, the ethical behavior of the leader was likely particularly salient to the personnel deployed in combat zones outside of the continental United States who constituted the sample. Second, emotional exhaustion is a particular threat to mission readiness in organizations in which physical safety is at risk (e.g., combat zone-deployed military personnel). Another potential strength is that we still found the hypothesized relationships while controlling for emotional stability and minority status.

In addition to using a longitudinal design, another step in future research might be to test a more complex path of the proposed model by adding performance or counterproductive work

behavior as a final outcome. Efforts to test the model with performance as the final outcome variable at both the individual and unit levels would likely be of high utility. In addition, we call for approaches that involve personal interviews with participants. Such efforts might help us identify how people process the ethical behaviors of the leader (i.e., as challenge stressors or just guidance for making decisions).

### **Implications for Command Practice**

The results of the present study reinforce a growing literature that indicates how ethical leadership exerts considerable influence on personnel and organizations. We suspect that many leaders attempt to behave ethically, but the notion that they need to proactively discuss ethical issues is outside of their imagination. Hence, training and developing leaders regarding ethical matters is likely to be of considerable utility. We suspect that leaders will more proactively address ethical issues once they realize that these efforts affect not only how personnel experience the unit dynamics, but also their well-being.

Our findings concerning the moderating role of conscientiousness suggest two opportunities for command practice. The first involves the treatment of conscientious personnel. Anecdotal evidence suggests that leaders rely on conscientious personnel because they are effective, but at the same time, the leaders may unwittingly underestimate the level of support that these personnel need. We suggest that leaders not simply assume that conscientious personnel will just do the right thing and, thus, pay little attention to addressing ethical issues with them. Rather, leaders are likely to be well served by proactively and regularly addressing ethical issues with all personnel. Second, we call on senior leaders to strengthen communication infrastructures that enable personnel to seek help with situations involving unethical leaders. Consistent with the notion of the tattle-tale, normative influences in the Department of Defense dictate appropriate and

inappropriate methods for dealing with such leaders. Most of these influences likely discourage talking negatively about the leader. However, we argue that these norms are dysfunctional when ethics are involved, particularly in high moral intensity situations.

### **Conclusion**

In sum, we found that ethical leadership affects emotional exhaustion directly and indirectly through unit cohesion. However, conscientiousness is a likely boundary condition of these effects. Ethical leadership is essentially irrelevant to these outcomes among personnel low in conscientiousness. Rather than acting as a personal resource that buffers the negative impact of low levels of ethical leadership, conscientiousness likely is activated by situations involving ethics. In short, we invite the reader to consider the possibility that low levels of ethical leadership are a threat to mission readiness and effectiveness and, therefore, encourage commanders to proactively address ethical issues in their commands.

## References

Alarcon, G., Eschleman, K. J., & Bowling, N. A. (2009). Relationships between personality variables and burnout: A meta-analysis. *Work & Stress, 23*(3), 244–263. doi:10.1080/02678370903282600

Ashforth, B. E., Gioia, D. A., Robinson, S. L., & Treviño, L. K. (2008). Re-viewing organizational corruption. *The Academy of Management Review, 33*(3), 670–684. doi:10.2307/20159430

Avey, J. B., Palanski, M. E., & Walumbwa, F. O. (2011). When leadership goes unnoticed: The moderating role of follower self-esteem on the relationship between ethical leadership and follower behavior. *Journal of Business Ethics, 98*(4), 573–582. doi:10.1007/s10551-010-0610-2

Avey, J. B., Wernsing, T. S., & Palanski, M. E. (2012). Exploring the process of ethical leadership: The mediating role of employee voice and psychological ownership. *Journal of Business Ethics, 107*(1), 21–34. doi:10.1007/s10551-012-1298-2

Avolio, B. J., Zhu, W., Koh, W., & Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior, 25*(8), 951–968. doi:10.1002/job.283

Baker, J. P., & Berenbaum, H. (2007). Emotional approach and problem-focused coping: A comparison of potentially adaptive strategies. *Cognition & Emotion, 21*(1), 95–118. doi:10.1080/02699930600562276

Bakker, A. B. (2008, November). *Work engagement*. Keynote speech presented at the eighth annual conference of the European Academy of Occupational Health Psychology, Valencia, Spain.

Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. doi:10.1108/02683940710733115

Bakker, A. B., Demerouti, E., de Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, 62(2), 341–356. doi:10.1016/S0001-8791(02)00030-1

Bakker, A. B., Schaufeli, W. B., Sixma, H. J., Bosveld, W., & Van Dierendonck, D. (2000). Patient demands, lack of reciprocity, and burnout: A five-year longitudinal study among general practitioners. *Journal of Organizational Behavior*, 21(4), 425–441. doi:10.1002/(SICI)1099-1379(200006)21:4<425::AID-JOB21>3.0.CO;2-#

Bandura, A. (1971). *Social learning theory*. Morristown, NJ: General Learning Press.

Bandura, A. (1986). *Social foundations for thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50, 248–287.

Bass, B. M., & Avolio, B. J. (2000). *Multifactor leadership questionnaire*. Redwood City, CA: Mindgarden.

Bass, B. M., Jung, D. I., Avolio, B. J., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207–218. doi:10.1037/0021-9010.88.2.207

Beal, D. J., Cohen, R. R., Burke, M. J., & McLendon, C. L. (2003). Cohesion and performance in groups: A meta-analytic clarification of construct relations. *Journal of Applied Psychology*, 88(6), 989–1004. doi:10.1037/0021-9010.88.6.989

Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods*, 8(3), 274–289. doi:10.1177/1094428105278021

Bello, S. M. (2012). Impact of ethical leadership on employee job performance. *International Journal of Business and Social Science*, 11, 228-236.

Beu, D. S., & Buckley, M. R. (2004). This is war: How the politically astute achieve crimes of obedience through the use of moral disengagement. *The Leadership Quarterly*, 15, 551–568.

Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations* (pp. 349–381). San Francisco: Jossey-Bass.

Brewer, E. W., & Shapard, L. (2004). Employee burnout: A meta-analysis of the relationship between age or years of experience. *Human Resource Development Review*, 3(2), 102–123. doi:10.1177/1534484304263335

Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly*, 17(6), 595–616. doi:10.1016/j.lequa.2006.10.004

Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97(2), 117–134. doi:10.1016/j.obhdp.2005.03.002

Cartwright, D. (1968). The nature of group cohesiveness. In D. Cartwright & A. Zander (Eds.) *Group dynamics: Research and theory*, pp. 91–109. London: Tavistock.

Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. *Journal of Applied Psychology*, 85(1), 65–74. doi:10.1037/0021-9010.85.1.65

Connor-Smith, J. K., & Flachsbart, C. (2007). Relations between personality and coping: A meta-analysis. *Journal of Personality and Social Psychology*, 93(6), 1080–1107. doi:10.1037/0022-3514.93.6.1080

Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *The Academy of Management Review*, 18(4), 621–656. doi:10.2307/258593

Corrigan, P. W., Diwan, S., Campion, J., & Rashid, F. (2002). Transformational leadership and the mental health team. *Administration and Policy in Mental Health and Mental Health Services Research*, 30(2), 97–108. doi: 10.1023/A:1022569617123

Costa, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences*, 13(6), 653–665. doi:10.1016/0191-8869(92)90236-I

Crawford, E. R., LePine, J. A., & Rich, B. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(5), 834–848. doi:10.1037/a0019364

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social-information processing mechanisms in children's development. *Psychological Bulletin*, 115, 74–101.

Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88(1), 160–169. doi:10.1037/0021-9010.88.1.160

Davis, J. H. (1969). *Group performance*. Reading, MA: Addison-Wesley.

De Hoogh, A. B., & Den Hartog, D. N. (2009). Neuroticism and locus of control as moderators of the relationships of charismatic and autocratic leadership with burnout. *Journal of Applied Psychology*, 94(4), 1058–1067. doi:10.1037/a0016253

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. doi:10.1037/0021-9010.86.3.499

Den Hartog, D., & Belschak, F. (2012). Work engagement and Machiavellianism in the ethical leadership process. *Journal of Business Ethics*, 107(1), 35–47. doi:10.1007/s10551-012-1296-4

Densten, I. L. (2005). The relationship between visioning behaviours of leaders and follower burnout. *British Journal of Management*, 16(2), 105–118. doi:10.1111/j.1467-8551.2005.00428.x

Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*, 41, 417–440. doi:10.1146/annurev.ps.41.020190.002221

Edwards, J. R., & Lambert, L. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods*, 12(1), 1–22. doi:10.1037/1082-989X.12.1.1

Ehrhart, M. G., & Klein, K. J. (2001). Predicting followers' preferences for charismatic leadership: The influence of follower values and personality. *The Leadership Quarterly*, 12(2), 153–179. doi:10.1016/S1048-9843(01)00074-1

Gabris, G. T., & Ihrke, D. M. (2001). Does performance appraisal contribute to heightened levels of employee burnout? The results of one study. *Public Personnel Management*, 30(2), 157–172.

Gaines, J., & Jermier, J. M. (1983). Emotional exhaustion in a high stress organization. *Academy of Management Journal*, 26(4), 567–586. doi:10.2307/255907

Goldberg, L. R. (1999). A broad-bandwidth, public-domain personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. J. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality psychology in Europe* (vol. 7, pp. 7–28). Tilburg, The Netherlands: Tilburg University Press.

Grandey, A. A., Dickter, D. N., & Sin, H. (2004). The customer is not always right: Customer aggression and emotion regulation of service employees. *Journal of Organizational Behavior*, 25(3), 397–418. doi:10.1002/job.252

Greene, C. N., & Schriesheim, C. A. (1980). Leader-group interactions: A longitudinal field investigation. *Journal of Applied Psychology*, 65(1), 50–59. doi:10.1037/0021-9010.65.1.50

Halbesleben, J. R. B. (2006). Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology*, 91(5), 1134–1145. doi:10.1037/0021-9010.91.5.1134

Halbesleben, J. R. B., & Buckley, M. (2004). Burnout in organizational life. *Journal of Management*, 30(6), 859–879. doi:10.1016/j.jm.2004.06.004

Halbesleben, J. R. B., Harvey, J., & Bolino, M. C. (2009). Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family. *Journal of Applied Psychology*, 94, 1452–1465. doi: 10.1037/a0017595

Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from <http://www.afhayes.com/public/process2012.pdf>.

Hetland, H., Sandal, G., & Johnsen, T. (2007). Burnout in the information technology sector: Does leadership matter? *European Journal of Work and Organizational Psychology*, 16(1), 58–75. doi:10.1080/13594320601084558

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. doi:10.1037/0003-066X.44.3.513

Hobfoll, S. E. (2001). The influence of culture, community, and the nested self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50, 337–421. doi: 10.1111/1464-0597.00062

Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resources loss, resources gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology*, 84, 632–643. doi: 10.1037/0022-3514.84.3.632

Howard, L. W., & Cordes, C. L. (2010). Flight from unfairness: Effects of perceived injustice on emotional exhaustion and employee withdrawal. *Journal of Business & Psychology*, 25(3), 409–428. doi:10.1007/s10869-010-9158-5

Howell, J. M., & Shamir, B. (2005). The role of followers in the charismatic leadership process: Relationships and their consequences. *Academy of Management Review*, 30(1), 96–112. doi:10.5465/AMR.2005.15281435

James, L. R., & Brett, J. M. (1984). Mediators, moderators, and tests for mediation. *Journal of Applied Psychology*, 69, 307–321. doi:10.1037/0021-9010.69.2.307

John, O. P., & Srivastava, S. (1999). The big five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin, O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102–138). New York, NY: Guilford Press.

Johnson, J. A., & Ostendorf, F. (1993). Clarification of the five-factor model with the abridged big five dimensional circumplex. *Journal of Personality & Social Psychology, 65*(3), 563–576.

Kacmar, K., Bachrach, D. G., Harris, K. J., & Noble, D. (2012). Exploring the role of supervisor trust in the associations between multiple sources of relationship conflict and organizational citizenship behavior. *The Leadership Quarterly, 23*(1), 43–54.  
doi:10.1016/j.lequa.2011.11.004

Kacmar, K., Bachrach, D. G., Harris, K. J., & Zivnuska, S. (2011). Fostering good citizenship through ethical leadership: Exploring the moderating role of gender and organizational politics. *Journal of Applied Psychology, 96*(3), 633–642. doi:10.1037/a0021872

Kahn, J. H., Schneider, K. T., Jenkins-Henkelman, T. M., & Moyle, L. L. (2006). Emotional social support and job burnout among high-school teachers: Is it all due to dispositional affectivity? *Journal of Organizational Behavior, 27*(6), 793–807. doi:10.1002/job.397

Kalshoven, K., & Boon, C. T. (2012). Ethical leadership, employee well-being, and helping: The moderating role of human resource management. *Journal of Personnel Psychology, 11*(1), 60–68. doi:10.1027/1866-5888/a000056

Kalshoven, K., Den Hartog, D. N., & De Hoogh, A. B. (2011). Ethical leadership at work questionnaire (ELW): Development and validation of a multidimensional measure. *The Leadership Quarterly, 22*(1), 51–69. doi:10.1016/j.lequa.2010.12.007

Kalshoven, K., Den Hartog, D., & De Hoogh, A. (2011). Ethical leader behavior and big five factors of personality. *Journal of Business Ethics, 100*(2), 349–366.  
doi:10.1007/s10551-010-0685-9

Kohlberg, L. (1969). State and sequence: The cognitive-development approach to socialization. In D. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 347–480). Chicago, IL: Rand-McNally.

Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2), 123–133.  
doi:10.1037/0021-9010.81.2.123

Lester, S. W., Meglino, B. M., & Korsgaard, M. (2008). The role of other orientation in organizational citizenship behavior. *Journal of Organizational Behavior*, 29(6), 829–841.  
doi:10.1002/job.504

Li, Y., Xu, J., Tu, Y., & Lu, X. (2013). Ethical leadership and subordinates' occupational well-being: A multi-level examination in China. *Social Indicators Research*.  
doi:10.1007/s11205-013-0321-z

Mach, M., Dolan, S., & Tzafrir, S. (2010). The differential effect of team members' trust on team performance: The mediation role of team cohesion. *Journal of Occupational and Organizational Psychology*, 83(3), 771–794. doi:10.1348/096317909X473903

Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice Hall.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2(2), 99–113.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual* (3rd ed.). Mountain View, CA: CPP, Inc.

Mayer, D. M., Aquino, K., Greenbaum, R. L., & Kuenzi, M. (2012). Who displays ethical leadership, and why does it matter? An examination of antecedents and consequences of

ethical leadership. *Academy of Management Journal*, 55(1), 151–171.  
doi:10.5465/amj.2008.0276

Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. (2009). How low does ethical leadership flow? Test of a trickle-down model. *Organizational Behavior and Human Decision Processes*, 108(1), 1–13. doi:10.1016/j.obhdp.2008.04.002

McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52(1), 81–90. doi:10.1037/0022-3514.52.1.81

McGrath, J. E. (1984). *Groups, interaction and performance*. Englewood Cliffs, NJ: Prentice-Hall.

Mount, M., K., & Barrick, M. R. (1995). The big five personality dimensions: Implications for research and practice in human resource management. *Research in Personnel and Human Resources Management*, 13, 153–200.

Mullen, B., & Copper, C. (1994). The relation between group cohesiveness and performance: An integration. *Psychological Bulletin*, 115(2), 210–227. doi:10.1037/0033-2909.115.2.210

Neubert, M., Carlson, D., Kacmar, K. K., Roberts, J., & Chonko, L. (2009). The virtuous influence of ethical leadership behavior: Evidence from the field. *Journal of Business Ethics*, 90(2), 157–170. doi:10.1007/s10551-009-0037-9

O'Connor, D. B., & O'Connor, R. C. (2004). Perceived changes in food intake in response to stress: The role of conscientiousness. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 20, 279–291. doi:10.1002/smi.1028

Olsen, O., Eid, J., & Larsson, G. (2010). Leadership and ethical justice behavior in a high moral intensity operational context. *Military Psychology*, 22(Supplement 1), S137–S156. doi:10.1080/08995601003644437

Perrewé, P. L., & Spector, P. E. (2002). Personality research in the organizational sciences. In G. R. Ferris and J. J. Martocchio (Eds.), *Research in personnel and human resources management* (pp. 1–63). U.S.: Elsevier Science/JAI Press.

Perry, S., Witt, L. A., Penney, L. M., & Atwater, L. (2010). The downside of goal-focused leadership: The role of personality in subordinate exhaustion. *Journal of Applied Psychology*, 95(6), 1145–1153. doi:10.1037/a0020538

Piccolo, R. F., Greenbaum, R., den Hartog, D. N., & Folger, R. (2010). The relationship between ethical leadership and core job characteristics. *Journal of Organizational Behavior*, 31(2–3), 259–278. doi:10.1002/job.627

Pierce, J. L., & Gardner, D. G. (2004). Self-esteem within the work and organizational context: A review of the organizational-based self-esteem literature. *Journal of Management*, 30, 591–622. doi: 10.1016/j.jm.2003.10.001

Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. doi:10.1037/0021-9010.88.5.879

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. doi:10.3758/BRM.40.3.879

Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185–227. doi:10.1080/00273170701341316

Purvanova, R. K., & Muros, J. P. (2010). Gender differences in burnout: A meta-analysis. *Journal of Vocational Behavior*, 77(2), 168–185. doi:10.1016/j.jvb.2010.04.006

Resick, C. J., Martin, G. S., Keating, M. A., Dickson, M. W., Kwan, H., & Peng, A. C. (2011). What ethical leadership means to me: Asian, American, and European perspectives. *Journal of Business Ethics*, 101(3), 435–457. doi:10.1007/s10551-010-0730-8

Schaubroeck, J. M., Hannah, S. T., Avolio, B. J., Kozlowski, S. J., Lord, R. G., Treviño, L. K., Dimotakis, N., & Peng, A. C. (2012). Embedding ethical leadership within and across organizational levels. *Academy of Management Journal*, 55, 1053–1078. doi:10.5465/amj.2011.0064

Schriesheim, C. A., Mowday, R., & Stogdill, R. M. (1979). Crucial dimensions of leader-group interactions. In J. G. Hunt & L. L. Larson (Eds.), *Crosscurrents in leadership*. Carbondale, IL: Southern Illinois University Press.

Seltzer, J., & Numerof, R. E. (1988). Supervisory leadership and subordinate burnout. *Academy of Management Journal*, 31(2), 439–446. doi:10.2307/256559

Seltzer, J., Numerof, R. E., & Bass, B. M. (1989). Transformational leadership: Is it a source of more burnout? *Journal of Health and Human Resources Administration*, 12, 174–185.

Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership. *Organizational Science*, 4, 577–594.

Shaw, M. E. (1981). *Group dynamics: The psychology of small group behavior*. New York, NY: McGraw-Hill.

Shay, J. (1994). *Achilles in Vietnam*. New York, NY: Atheneum Press.

Shirom, A. (1989). Burnout in work organizations. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 25–48). Oxford, England: John Wiley & Sons.

Snijders, T. B., & Bosker, R. J. (2007). *Multilevel analysis. An introduction to basic and advanced multilevel modeling* (2nd ed.). London, UK: Sage Publications.

Sosik, J. J., Avolio, B. J., & Kahai, S. S. (1997). The impact of leadership style and anonymity on group potency and effectiveness in a GDSS environment. *Journal of Applied Psychology*, 82, 89–103.

Spector, P. E. (2003). Individual differences in health and well-being in organizations. In D. A. Hofmann & L. E. Tetrick (Eds.), *Health and safety in organizations: A multilevel perspective* (pp. 29–55). San Francisco: Jossey-Bass.

Stouten, J., Baillien, E., Van den Broeck, A., Camps, J., De Witte, H., & Euwema, M. (2010). Discouraging bullying: The role of ethical leadership and its effects on the work environment. *Journal of Business Ethics*, 95, (Supplement 1), 17–27.  
doi:10.1007/s10551-011-0797-x

Taylor, R. T., & Rosenbach, W. (1984). *Military leadership in pursuit of excellence*. Boulder, CO: Westview Press.

Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88, 500–517. doi:10.1037/0021-9010.88.3.500

Tett, R. P., & Guterman, H. A. (2000). Situation trait relevance, trait expression, and cross-situational consistency: Testing a principle of trait activation. *Journal of Research in Personality*, 34(4), 397–423. doi:10.1006/jrpe.2000.2292

Treviño, L. (1986). Ethical Decision Making in Organizations: A Person-Situation Interactionist Model. *Academy Of Management Review*, 11(3), 601–617. doi:10.5465/AMR.1986.4306235

Van Yperen, N. W., & Snijders, T. A. B. (2000). A multilevel analysis of the demands-control model: Is stress at work determined by factors at the group level or the individual-level? *Journal of Occupational Health Psychology*, 5, 182–190. doi: 10.1037/1076-8998.5.1.182

Walsh, B. M., Matthews, R. A., Tuller, M. D., Parks, K. M., & McDonald, D. P. (2010). A multilevel model of the effects of equal opportunity climate on job satisfaction in the military. *Journal of Occupational Health Psychology*, 15(2), 191–207. doi:10.1037/a0018756

Walumbwa, F. O., & Schaubroeck, J. (2009). Leader personality traits and employee voice behavior: Mediating roles of ethical leadership and work group psychological safety. *Journal of Applied Psychology*, 94(5), 1275–1286. doi:10.1037/a0015848

Walumbwa, F. O., Morrison, E. W., & Christensen, A. L. (2012). Ethical leadership and group in-role performance: The mediating roles of group conscientiousness and group voice. *Leadership Quarterly*, 23(5), 953–964. doi:10.1016/j.lequa.2012.06.004

Wang, Q., Bowling, N. A., & Eschleman, K. J. (2010). A meta-analytic examination of work and general locus of control. *Journal of Applied Psychology*, 95(4), 761–768. doi:10.1037/a0017707

Weaver, G. R., Treviño, L., & Agle, B. (2005). "Somebody I look up to": Ethical role models in organizations. *Organizational Dynamics*, 34(4), 313–330. doi:10.1016/j.orgdyn.2005.08.001

Williams, L. J., Cote, J. A., & Buckley, M. (1989). Lack of method variance in self-reported affect and perceptions at work: Reality or artifact? *Journal of Applied Psychology*, 74(3), 462–468. doi:10.1037/0021-9010.74.3.462

Wright, T. A., & Bonett, D. G. (1997). The contribution of burnout to work performance. *Journal of Organizational Behavior*, 18(5), 491–499. doi:10.1002/(SICI)1099-1379(199709)18:5<491::AID-JOB804>3.0.CO;2-I

Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology*, 83(3), 486–493. doi:10.1037/0021-9010.83.3.486

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14, 121–141. doi: 10.1037/1072-5245.14.2.121

Xanthopoulou, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Taris, T. W., & Schreurs, P. J. G. (2007). When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology*, 22, 766–786. doi: 10.1108/02683940710837714

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74, 235–244. doi: 10.1016/j.jvb.2008.11.003

Zaccaro, S. J., Blair, V., Peterson, C., & Zazanis, M. (1995). Collective efficacy. In J. E. Maddux (Ed.), *Self-efficacy, adaptation and adjustment: Theory, research and application* (pp. 305–328). New York: Plenum Press.

Zellars, K. L., Perrewé, P. L., Hochwarter, W. A., & Anderson, K. S. (2006). The interactive effects of positive affect and conscientiousness on strain. *Journal of Occupational Health Psychology*, 11(3), 281–289. doi:10.1037/1076-8998.11.3.281

Zhang, X., Walumbwa, F. O., Aryee, S., & Chen, Z. (2013). Ethical leadership, employee citizenship and work withdrawal behaviors: Examining mediating and moderating processes. *The Leadership Quarterly*, 24(1), 284–297. doi:10.1016/j.lequa.2012.11.008

Zhu, W., May, D. R., & Avolio, B. J. (2004). The impact of ethical leadership on employee outcomes. *Journal of Leadership and Organizational Studies*, 11, 16–26.

Zohar, D. (1997). Predicting burnout with a hassle-based measure of role demands. *Journal of Organizational Behavior*, 18(2), 101–115.  
doi:10.1002/(SICI)1099-1379(199703)18:2<101::AID-JOB788>3.0.CO

Zohar, D. (2002). Modifying supervisory practices to improve subunit safety: A leadership-based intervention model. *Journal of Applied Psychology*, 87, 156–163.  
Doi:10.1037/0021-9010.90.4.616.

Table 1

*Descriptive Statistics and Intercorrelation Matrix*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Age	2.41	0.09									
2. Gender	1.20	0.40	-.09								
3. Rank	2.35	1.16	.52**	-.01							
4. Minority status	1.44	0.50	.01	.15**	.02						
5. Emotional stability	3.42	0.78	.13*	-.17**	.10	.01	(.60)				
6. Ethical leadership	3.53	0.84	.12*	-.09	.08	-.04	.31**	(.84)			
7. Conscientiousness	4.02	0.73	.16**	-.02	.13*	-.10	.40**	.51**	(.77)		
8. Team cohesion	3.83	1.06	.21**	-.14**	.18**	-.17**	.18**	.36**	.16**	(.92)	
9. Emotional exhaustion	3.01	1.03	-.09	.06	-.06	-.11**	-.49**	-.35**	-.11**	-.31**	(.91)

Note. "Age" reflects categories of age. Values on the diagonal represent Cronbach's alpha ( $\alpha$ ).  $N = 338$ . \*\* $p < 0.01$ . \* $p < 0.05$ .

Table 2

*Comparison of Confirmatory Factor Analyses Models*

Models	$\chi^2$	<i>df</i>	$\delta\chi^2$	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>	<i>SRMR</i>
4-factor model (measurement model)	323.16	112	-	.94	.93	,08	.05
3-factor model (combing ethical leadership and team cohesion)	902.14	115	578.98	.77	.73	.14	.14
2-factor model (combining ethical leadership, team cohesion, and emotional exhaustion)	1526.08	117	623.94	.59	.53	.19	.17

Table 3

*Regression Results for Mediation Tests*

Variable		B	SE	t	p
Total and direct effects					
Total effect of ethical leadership on emotional exhaustion		-.27	.06	-4.54	.000
Team cohesion regressed on ethical leadership		.41	.07	6.09	.000
Emotional exhaustion regressed on team cohesion, controlling for ethical leadership		-.20	.05	-4.22	.000
Emotional exhaustion regressed on ethical leadership, controlling for team cohesion		-.19	.06	-3.08	.002
Bootstrap results for indirect effect					
	M	SE		LL 99% CI	UL 99% CI
Effect	-.08	.03		-.15	-.04

Table 4

*Regression Results for Conditional Indirect Effect*

Independent variables	B	SE	t	p
Team cohesion				
Intercept	3.79	.06	66.16	.000
Minority status	-0.36	.11	-3.38	.001
Emotional stability	0.13	.08	1.68	.093
Ethical leadership	0.42	.08	5.65	.000
Conscientiousness	-0.04	.10	-.44	.654
Ethical leadership × Conscientiousness	0.14	.07	1.93	.054
Emotional Exhaustion				
Intercept	3.09	.05	65.30	.000
Minority status	-0.26	.09	-2.84	.005
Emotional stability	-0.59	.06	-9.36	.000
Ethical leadership	-0.25	.07	-3.77	.000
Team cohesion	-0.17	.05	-3.71	.000
Conscientiousness	0.17	.08	2.10	.037
Ethical leadership × Conscientiousness	-0.21	.06	-3.44	.001
Team cohesion × Conscientiousness	-0.15	.05	-2.80	.005
Bootstrap results for conditional indirect effect at conscientiousness = $M \pm 1 SD$				
Conscientiousness	Effect	SE	LLCI	ULCI
-1 SD (-0.73)	-0.02	.02	-.09	.02
M (0)	-0.07	.03	-.14	-.03
+ 1 SD (0.73)	-0.15	.05	-.25	-.07

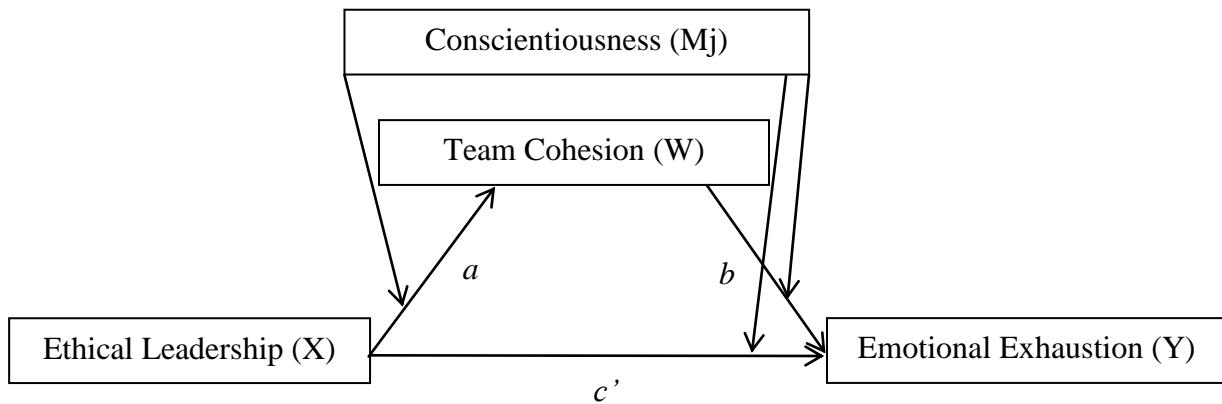


Figure 1. Proposed Conceptual Model

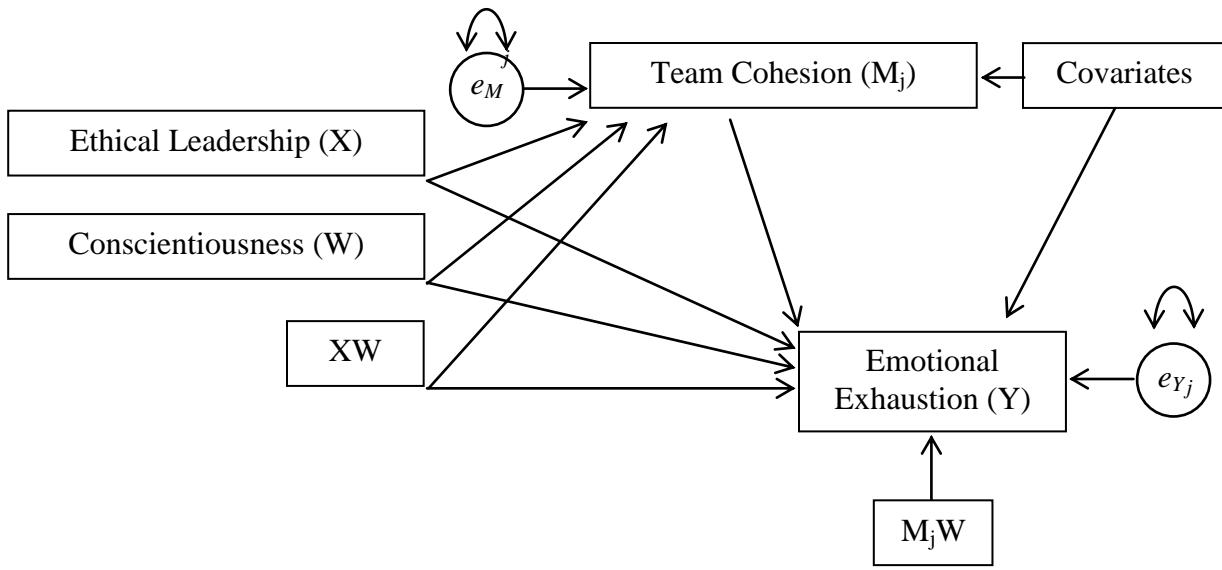


Figure 2. Proposed Structural Model. Note: Covariates = Gender and minority status.

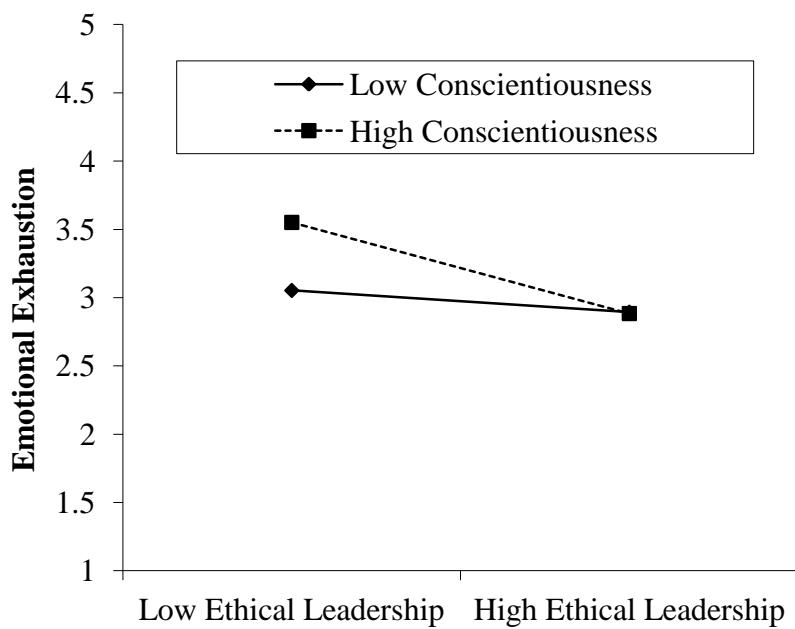


Figure 3. Direct effect (Path c).

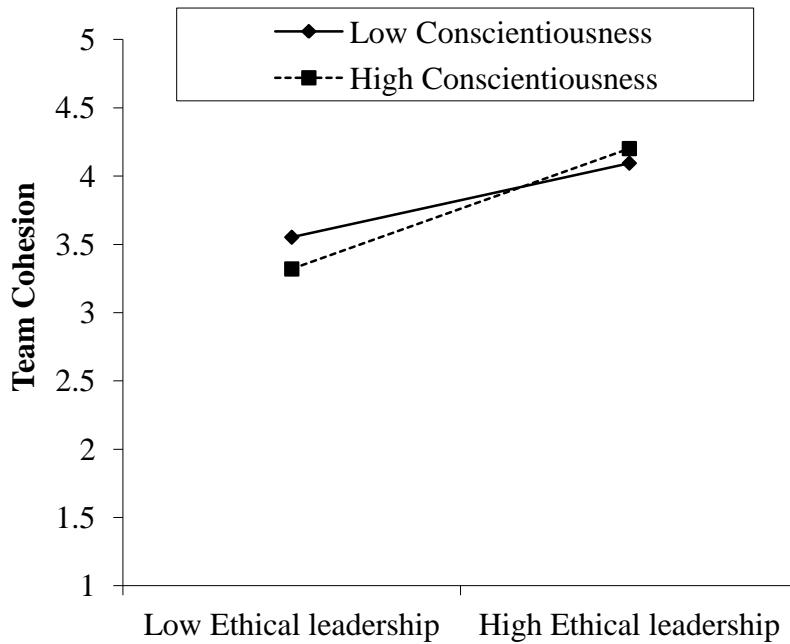


Figure 4. First Stage of the Mediation (Path a).

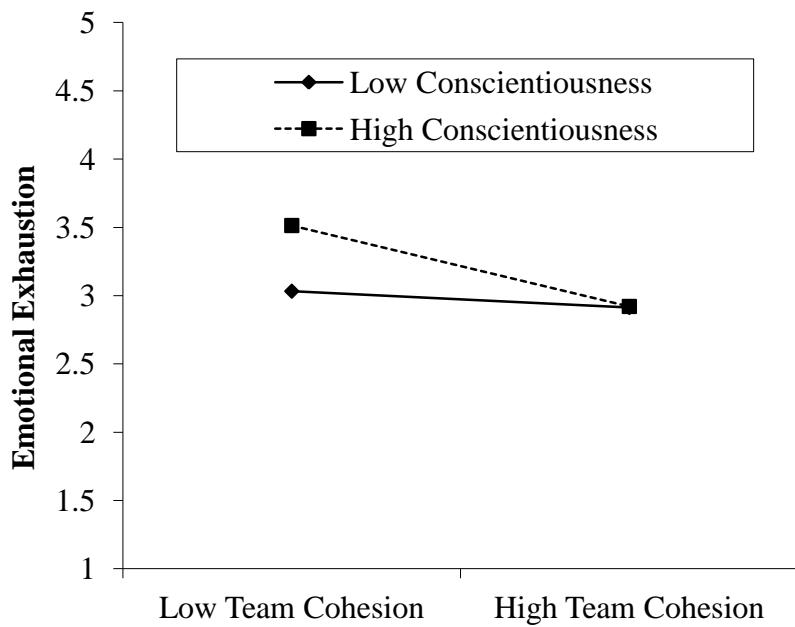


Figure 5. Second Stage of the Mediation (Path b).

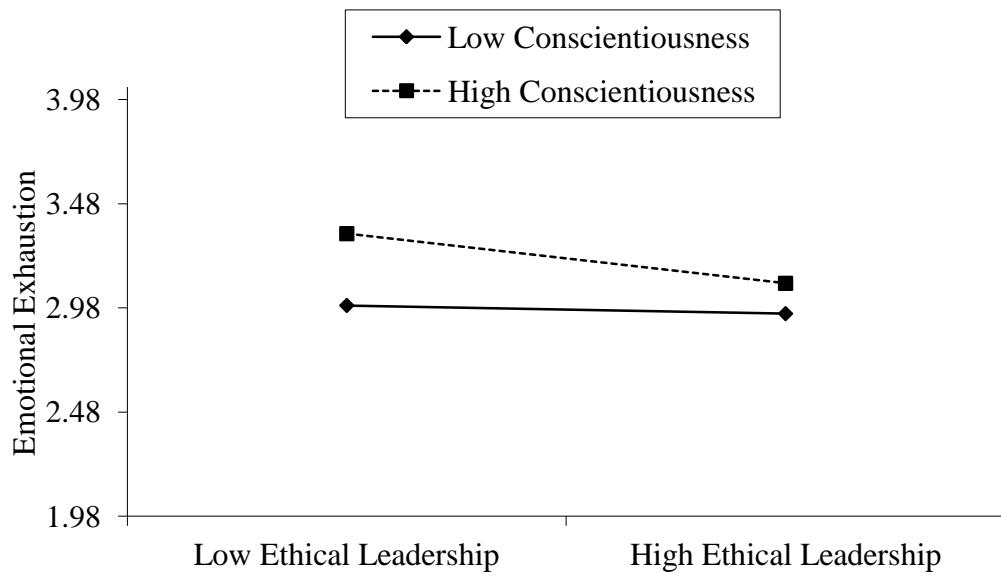


Figure 6. Conditional Indirect Effect (Path c').